BEFORE THE ARIZONA CORPORATION COMMISSION

MARC SPITZER
Chairman
WILLIAM A. MUNDELL
Commissioner
JEFF HATCH-MILLER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND FOR APPROVAL OF PURCHASED POWER CONTRACT	)	DOCKET NO. E-01345A-03-0437

DIRECT

TESTIMONY

OF

BARBARA KEENE

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

FEBRUARY 3, 2004

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EXECUTIVE SUMMARY
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Ms. Keene's testimony recommends that APS recover its costs for pre-approved demand-side management (DSM) programs through a DSM adjustment mechanism. Staff recommends that the total of System Benefits should be $33,115,801. Staff recommends that the caps per service on EPS-1 be increased to help APS meet its Environmental Portfolio Standard requirements. Staff does not oppose the Returning Customer Direct Assignment Charge with conditions. Staff recommends that some of the charges on the service schedules be set at amounts lower than APS proposes. Staff also opposes some of the proposed wording changes on the service schedules.

INTRODUCTION

Q. Please state your name and business address.

A. My name is Barbara Keene. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. By whom are you employed and in what capacity?

A. I am employed by the Utilities Division of the Arizona Corporation Commission as a Public Utilities Analyst. My duties include evaluation of electric utility special contracts, review of utility tariff filings, assessment of utility demand-side management programs, and analysis of electric utility production costs and marginal costs. A copy of my résumé is provided in the Appendix.

Q. As part of your employment responsibilities, were you assigned to review matters contained in Docket No. E-01345A-03-0437?

A. Yes.

Q. What is the purpose of your testimony?

A. My testimony is concerned with demand-side management ("DSM") for Arizona Public Service ("APS"), System Benefits, the Environmental Portfolio Standard, the Returning Customer Direct Assignment Charge, and APS' service schedules.

DEMAND-SIDE MANAGEMENT

__Benefits of DSM__

Q. What is DSM?

A. DSM is the planning, implementation, and evaluation of programs to shift peak load to off-peak hours, to reduce peak demand (kW), and to reduce energy consumption (kWh) in a cost-effective manner. DSM programs are also known as conservation or energy efficiency programs.

Q. Does APS and the rest of society benefit from having DSM programs?

A. Cost-effective DSM programs can meet the demand for electric energy services at a lower cost than purchasing or generating power. Reduced peak demand can delay the need for construction of new generation and transmission facilities. In addition, reducing energy (kWh) needs reduces the operating costs of current generating facilities. Reduced energy production may also lead to reduced air emissions from power plants, reduced consumption of water by generating unit cooling towers, and reduced degradation of land at mining sites.

Q. Why should APS and Staff consider the benefits and costs of DSM to society rather than just to APS?

A. We are seeking the least cost means of meeting the demand for electric energy services. A program that is not least cost wastes society's resources. Because customer costs and new generation costs may not be part of APS' costs, we need to look beyond APS' costs and benefits. The Commission adopted the use of the societal cost test in its resource planning decision (Decision No. 57589).

Q. What are the societal benefits of a DSM program?

A. From a societal perspective, relevant benefits come from avoiding new generating, transmission, and distribution capacity and avoiding burning of fuel and other variable costs. Because existing power plants have already been built and the associated societal costs have already been incurred, the fixed costs of existing power plants are sunk costs which cannot be avoided by a reduction in the demand for kW and kWh. Therefore, the only costs to society that can be avoided by DSM are those associated with the construction of new capacity and the variable costs associated with the generation of additional electricity.

Q. How can the societal costs of a DSM program be calculated?

A. The costs to society to implement a DSM program are the incremental costs of any equipment, including installation and operating costs, and program administrative costs. Incentives offered to customers to participate are not societal costs, but are transfer payments (transfers of income from one person or organization to another without supplying goods or services for these payments).

APS' Current DSM Programs

Q. Does APS currently have any DSM program?

A. Yes. According to semi-annual reports filed with the Commission, APS currently has one DSM program: Energy-Wise Assistance Program. According to APS' response to STF 5-13, APS has other DSM programs that I describe later in my testimony.

Q. Please describe the Energy-Wise Assistance Program.

A. The Energy-Wise Assistance Program was pre-approved by Staff on December 21, 1998. As presented to Staff in 1998, the program is designed to provide low-income customers with weatherization and energy education and consists of the following components: Weatherization, Repair/Replacement Program, Energy Education, ACAA Administration, and Communications.

Q. Please describe the Weatherization component.

A. The Weatherization component is comprehensive and includes health and safety measures. Where possible, the program is coordinated with the federal Weatherization Assistance Program ("WAP") to achieve maximum cost efficiency and expand the scope of measures performed on each house. The maximum APS contribution is capped at $1,500 per house, excluding administrative costs. Customers must have incomes less than 150 percent of the poverty level, using a 90-day test proof of income, to be eligible for services. Customers must also show proof of home ownership or tenant waivers from their landlords. Eligible measures include adjusting space heaters and evaporative coolers, repairing ductwork, installing weather stripping and insulation, and general repairs to roofs, windows, doors, ceilings, and floors.

Q. Please describe the Repair/Replacement Program component.

A. This component repairs or replaces HVAC (heating, ventilation, and air conditioning) systems, evaporative coolers, and electric water heaters. Replacement is limited to when repair costs exceed replacement costs or when the appliance is found to be inoperable with repairs. Customers must have incomes less than 150 percent of the poverty level, using a 30-day test proof of income, to be eligible for services. Customers must show proof of ownership of the appliance and social security cards for all members of the household.

Q. Please describe the Energy Education component.

A. Energy Education consists of training community action agency staff to deliver energy education, both in-office and in-home. In addition, APS will provide $25 to a community action agency to help cover the costs of an in-home visit for bill assistance recipients to receive energy education.

Q. Please describe the ACAA Administration component.

A. The Arizona Community Action Association ("ACAA") administers the Energy-Wise Assistance Program. ACAA coordinates the program between APS and nine local community action agencies (located in Phoenix, Tucson, Flagstaff, Yuma, Coolidge, Globe, and Safford); serves as the central point for invoicing, tracking, validating, and reporting activities to APS; identifies technical assistance needs and provides training; and develops the energy education program. In response to requests from ACAA, the Arizona Energy Office ("AEO") calculates present value analyses of how much measures are worth, comparing costs to install a measure with savings to the customer.

Q. Please describe the Communications component.

A. This component includes the design and development of brochures, posters, stickers, survey forms, and evaluation forms.

Q. How much has APS agreed to spend on the Energy-Wise Assistance Program?

A. As part of the 1999 Settlement, APS agreed to continue this program in an annual amount of at least $500,000 through July 1, 2004.

Q. How much has APS been spending on the Energy-Wise Assistance Program?

A. APS has reported the following program expenditures: $434,763 in 1999; $462,990 in 2000; $399,365 in 2001, and $394,354 in 2002. Therefore, APS did not spend the promised $500,000 in any year. In addition, those amounts include expenditures for bill assistance. Bill assistance is not DSM, although it is a System Benefit which will be discussed later in this testimony.

Q. What other DSM programs does APS currently have?

A. In 1997, Staff pre-approved two programs for APS. They were the Residential New Construction Market Transformation Program and the Residential HVAC Retrofit Market Transformation Program. Beginning in 2001, APS stopped reporting on these programs in its semi-annual DSM reports. A statement in the report for the second half of 2000 after the section on Market Transformation was, "This is the last time this will be reported as a DSM activity." Staff understood this to mean that the programs were no longer being conducted. At that time, Decision No. 63364 that approved the Environmental Portfolio Standard said that utilities should shift DSM spending to renewables. However, APS' response to STF 5-13 indicates that these programs are still in effect. APS has indicated that it will revise its semi-annual DSM reports to include these programs.

Q. Please describe the Residential New Construction Market Transformation Program.

A. As presented to Staff in 1997, the objective of the program was to encourage the market adoption of energy-efficient new home construction techniques and more energy-efficient HVAC systems. The program promotes the Environmental Protection Agency's Energy Star Home Program, which is a voluntary labeling program for energy-efficient products, including houses. APS provides training for home builders on selling energy efficiency and the Energy Star Home Program. For HVAC contractors, APS provides training, qualification, and advertising costs. APS provides consumers with information and referrals to qualified contractors. Per APS' response to STF 5-14, APS spent $168,159 on this program in 2002.

Q. Please describe the Residential HVAC Retrofit Market Transformation Program.

A. As presented to Staff in 1997, this program sought to educate contractors and residential customers about energy-efficient HVAC on existing houses. Per APS' response to STF 5-14, APS spent $106,357 on this program in 2002. APS also spent $372,877 on joint education and promotional costs for both residential market transformation programs.

Q. Are there any other DSM programs?

A. According to APS' response to STF 5-13, APS also has programs for Residential Time of Use (educational materials); Commercial Energy Information, Analysis and Training; and Commercial and Industrial Power Partners Program. These programs have not been pre-approved by Staff. In 2002, APS spent $10,335; $47,595; and $13,383 on these programs, respectively.

Q. What DSM programs should APS pursue?

A. APS should evaluate possible DSM programs, considering the costs and kW and kWh savings associated with each program. APS should then select the most beneficial and cost-effective projects to pursue.

Ideally, APS should engage in DSM programs as long as the incremental societal benefits (deferred capacity, avoided fuel costs, and avoided environmental impacts) are greater than the incremental cost of those programs to society.

Cost Recovery of DSM Programs

Q. How does APS currently recover its costs related to its DSM activities?

A. In Decision No. 59601 (APS' Rate Reduction Agreement, April 24, 1996), the Commission allowed $7 million to be included in base rates for DSM and renewables. Of the $7 million total, APS was required to undertake at least $3 million of DSM per year on average, and at least $3 million on renewable projects per year on average. The Decision provides that if APS spends less than the $7 million included in base rates on DSM and renewables per year on average, the Commission, at the next rate case, shall review these expenditures and may order appropriate refunds to ratepayers.

Q. How much did APS spend each year?

A. According to semi-annual DSM and Renewables reports filed by APS, APS spent an annual average of $6,992,000 from 1996 through 2002. That number is close enough to $7,000,000 to not require a refund to ratepayers.

Q. What cost recovery mechanisms could be used to recover APS' DSM costs in the future?

A. Possible mechanisms include using a deferral account with amortization into base rates, simply putting a level of costs in base rates, recovery through any fuel and purchased power adjustor approved for APS, or setting up a separate DSM adjustment mechanism.

Q. Should APS recover its DSM costs through a deferral account with base rate amortization?

A. No. When a deferral account is used, pre-approved DSM costs are placed in the deferral account and earn interest until the utility's next rate case, when the costs are considered for base rate cost recovery. If there are significant DSM activities taking place, the deferral account balance grows quickly, including the attendant interest, and can become a major cost which has to be dealt with in the utility's next rate case. In addition, a deferral account may not allow for the timely recovery of DSM costs to the same extent as some other cost recovery mechanisms.

Q. Should APS recover its DSM costs directly through base rates with no deferral accounting?

A. No. While recovery of DSM costs through base rates provides for current cost recovery, placing DSM costs in base rates does not provide the Commission and APS with flexibility to increase or decrease DSM spending, as circumstances dictate. Additionally, a utility could choose to end its DSM activities, and there would be no way to remove the DSM funding from base rates until the next rate case.

Q. Should APS recover its DSM costs through a fuel and purchased power adjustor (if approved for APS)?

A. No. While recovery of DSM costs through a fuel and purchased power adjustor would provide timely and more flexible cost recovery, it would complicate the administration of the fuel and purchased power adjustor. One disadvantage of this type of recovery mechanism is that customers who choose to obtain power in the competitive market would not continue to pay for DSM which is a public benefit.

Q. How should APS recover its costs for DSM programs?

A. Staff recommends that APS be allowed to recover its costs for pre-approved DSM programs through a separate DSM adjustment mechanism. Recovery of pre-approved DSM costs through a DSM adjustment mechanism would provide the flexibility to adjust the level of DSM spending as needed in the future, while also providing timely recovery of pre-approved DSM costs. It would also provide a separate and specific accounting for pre-approved DSM costs.

A DSM adjustment mechanism would allow the costs associated with pre-approved programs to be recovered as the level of expenses associated with those programs changes. In addition, separating these expenses from other expenses included in base rates provides an incentive to initiate programs at any time rather than in the context of a rate case.

Q. How would customers be billed?

A. The DSM adjustment mechanism, as a charge per kWh, would be included on all customer bills as a separate line item. It would be a nonbypassable charge, meaning that customers who obtain power in the competitive market would continue to pay the charge.

Q. How would the proposed DSM adjustment mechanism work?

A. The proposed DSM adjustment mechanism would consist of an account where the costs for pre-approved DSM programs would be recorded for each program by APS as the costs were incurred. By January 31 of each year, APS would file with Staff to set the per kWh DSM adjustment mechanism charge. APS would document the costs placed in each DSM program subaccount during the previous year and the revenue received from ratepayers through the per kWh charge during the previous year. Staff would analyze this information. Then the per kWh charge for the next year would be calculated by dividing the account balance by the number of kWh used by customers in the previous year.

Q. Should annual DSM program expenditures be capped?

A. Yes. After reviewing past expenditures, Staff has determined that an appropriate amount for an annual cap would be $4 million.

Q. What kinds of costs should APS be able to recover?

A. Staff recommends that APS recover the program costs associated with pre-approved DSM projects. Program costs include administrative expenses, monitoring expenses, any incentives such as rebates, promotional expenses, educational program expenses, and the costs of demonstration facilities. The total costs to be recovered could not exceed $4 million per year.

Q. Because Staff is recommending an adjustment mechanism to recover DSM costs, is an adjustment to operating expenses required?

A. Yes. Staff witness Dittmer describes in his testimony the adjustment ($1,051,381) necessary to remove DSM costs from operating expenses.

Q. What programs should APS include in the DSM adjustment mechanism?

A. The costs of the Energy-Wise Assistance Program should be included in the DSM adjustment mechanism after the conclusion of this rate case.

Q. What about including the other current DSM programs?

A. None of the costs of the other programs should be included in the DSM adjustment mechanism at this time. For the two residential market transformation programs, APS should provide updated information on features of the programs as well as the evaluation information that APS had indicated at the time of pre-approval that it would provide at regular intervals. After Staff has reviewed the information and determines that the programs are cost-effective, APS could begin to recover the costs of those programs through the adjustment mechanism. For the programs that have never been submitted to Staff for pre-approval, APS would need to submit those programs through the procedures described below.

Implementation of DSM Programs

Q. How should APS implement DSM programs?

A. APS should submit proposed programs to Staff for pre-approval. (Decision No. 59601 delegated the authority to pre-approve DSM programs to Staff.) APS should also file a copy of DSM program plans with Docket Control, and interested parties would have 20 days to comment on the proposed DSM program. After a program is pre-approved, APS may begin entering the costs for that program as they are incurred into a new DSM adjustment mechanism subaccount.

Q. What should APS include in a DSM program proposal?

A. The proposal should include the purpose of the program, a description of the project, the expected level of participation, the expected kW and kWh savings, the expected societal costs, an implementation plan and schedule, a monitoring and evaluation plan, a description of incentives (if any), and a marketing plan.

Staff would consider whether the benefits of the measures to society exceed the costs to society. In addition, Staff would consider the reasonableness of any customer incentives proposed by APS. New programs could be added or existing programs terminated anytime during the year subject to Staff approval.

Q. Why should each program proposal include a monitoring and evaluation plan?

A. Monitoring can establish the impacts of each program on kWh and kW of consumption. Estimation of these impacts is necessary to determine whether a measure is actually cost-effective and to determine the amount of kW and kWh savings. Accurate estimates of savings are necessary in demand forecasting and long-range planning.

Monitoring DSM programs also enables the utility to refine its marketing and incentive efforts for each program. APS would need information on whether an incentive it offers is adequate, whether any participants are getting a free lunch, whether customers are receiving conservation information and using it properly, and so on.

Q. Could engineering estimates be used to determine kW and kWh savings at lower cost than a monitoring program?

A. No. Engineering data can provide some guidance on savings, but data on actual experience, taking into account customer behavior and field performance of the measure, is essential. An example of customer behavior influencing kW and kWh savings is when the customer lowers a thermostat because the new air conditioner is more efficient and costs less to operate. Actual experience may be far different than engineering data would suggest. It is difficult to know whether a program is cost-effective without knowing actual savings.

Q. What are Staff's recommendations regarding monitoring?

A. APS should include a monitoring plan in each program proposal. If the monitoring activity reveals that the program is not working as well as expected, APS should modify or terminate the program. APS should notify Staff about any plans to terminate a program before such termination occurs. APS should provide Staff with its plans for notification to potential participants. If a program is terminated, APS would be expected to give proper notice to potential participants as well as honor existing commitments.

For programs with large numbers of participants, a sample of customers should be observed to obtain usage data, customer characteristics, and building characteristics so that a statistical analysis of the measures can be conducted. Weather should be taken into account as appropriate. For measures installed in only a few locations, APS may have to monitor all of the sites to determine the impacts of the program. APS may monitor all of the customer's electricity usage or may submeter end uses, depending on whether end-use metering is the only way to measure the program impacts. It may be necessary to monitor customers before and after installation of measures, or a comparison group may be monitored.

Monitoring a particular type of measure may be discontinued after one or two years of experience, but APS should plan to monitor some customers over a longer period to determine whether the customers have stopped using the conservation measure after several years or have altered the measure's characteristics.

Customer surveys, focus groups, and other market evaluation techniques may be used to determine the effectiveness of the marketing and incentives for each measure.

Q. How can Staff monitor APS' efforts?

A. Staff recommends that APS submit mid-year and end-year reports in Docket Control containing the following information separately for each program: a brief description of the program; program modifications; programs terminated; the level of participation; a description of monitoring activities and results; kW and kWh savings; problems encountered and proposed solutions; costs incurred during the reporting period disaggregated by type of cost (such as administrative costs, rebates, and monitoring costs); findings from all research projects; and other significant information. Each report would be due 60 days after the conclusion of the reporting period. In addition, the

Commission may review program costs and performance in future rate cases. As part of its semi-annual DSM reports, APS would present the status of each subaccount balance.

SYSTEM BENEFITS

Q. What are System Benefits?

A. A.A.C. R14-2-1601(41) defines System Benefits as Commission-approved utility low income, demand-side management, consumer education, environmental, renewables, long-term public benefit research and development, nuclear fuel disposal and nuclear power plant decommissioning programs, and other programs that may be approved by the Commission from time to time.

Q. What is the System Benefit Charge?

A. A.A.C. R14-2-1608 requires each utility distribution company to file for Commission review nonbypassable rates or related mechanisms to recover the applicable pro-rata costs of System Benefits from all consumers located in the utility distribution company's service area. Utility distribution companies are to file for review of the System Benefit Charge ("SBC") at least every three years.

Q. How did the SBC first become established for APS?

A. The 1999 Settlement Agreement had Direct Access tariffs attached to it that contained an amount for the SBC ($0.00115/kWh for all Direct Access customers). Neither the Settlement Agreement nor the Decision that approved it contain any discussion about how the SBC was derived for APS.

Q. What programs does APS currently include in its SBC?

A. Per APS' response to WRA 1-8, the proposed SBC includes $9,844,557 for renewables, DSM, and low income programs; $18,929,620 for Palo Verde decommissioning;

$2,839,027 for on-going independent spent fuel storage (ISFS); and $8,130,791 for amortization of ISFS. The total SBC, as proposed by APS, is $39,743,995.

Q. Please discuss each component of the SBC.

A. Staff witness Harry Judd will discuss the Palo Verde decommissioning and ISFS components of the SBC. Since Staff is recommending a separate mechanism to recover costs for DSM described in the above section of this testimony, DSM costs should be removed from the SBC. Costs for renewables ($6,000,000) are used to help meet the Environmental Portfolio Standard requirements discussed in the next section of this testimony. Low income programs consist of the bill assistance ($61,679) mentioned in the above testimony about the Energy-Wise Assistance Program and rate discounts associated with E-3 and E-4 assistance rates ($2,844,557).

Q. Please describe the E-3 and E-4 assistance rates.

A. Rate Schedules E-3 (Energy Support Program) and E-4 (Medical Care Equipment) provide discounted rates to low-income residential customers. The amount of discount depends on monthly usage. According to APS' annual report on E-3 and E-4, 24,196 customers received discounts totaling $2,844,557 in 2002. Administrative expenses were $64,939.

Q. What does Staff recommend to be included in the SBC?

A. Staff recommends that the SBC include $8,906,236 for renewables and low income programs (including $6,000,000 for renewables, $61,679 for bill assistance, and $2,844,557 for E-3 and E-4 rate discounts), $13,411,212 for Palo Verde Decommissioning, $2,839,027 for ISFS, and $7,959,326 for amortization of ISFS. The total SBC should be $33,115,801. The difference between APS' proposed total SBC and Staff's proposed total SBC is due to Staff's removal of DSM costs from the SBC and the adjustments proposed by Harry Judd in the amounts for Palo Verde decommissioning and ISFS amortization.

ENVIRONMENTAL PORTFOLIO STANDARD

Q. What is the Environmental Portfolio Standard?

A. The Environmental Portfolio Standard ("EPS"), embodied in A.A.C. R14-2-1618, was approved by the Commission in 2001. The EPS requires utility distribution companies to derive a portion of the retail energy they sell from solar resources or environmentally friendly renewable electricity technologies. The portfolio percentage increases annually and was 0.4 percent in 2002, with at least 50 percent from solar resources.

Q. Did APS meet its EPS requirement in 2002?

A. No. APS only met 60 percent of its 2002 requirement.

Q. What did APS do in regard to renewables in 2002?

A. During 2002, APS installed new solar generation capacity, maintained existing solar plants, provided off-grid solar services, continued its Solar Partners "green pricing" program, explored non-solar renewables, tested new technologies, and purchased EPS credits from other providers.

Q. How is the EPS funded?

A. The costs of the EPS are to be recovered through current System Benefits Charges and through an Environmental Portfolio Surcharge, approved by Decision No. 63354 on February 8, 2001. The surcharge is currently set at $0.000875 per kWh with monthly caps per service of $0.35 for residential customers, $13.00 for non-residential customers, and $39.00 for non-residential customers with demands of 3,000 kW or more.

Q. How much funding did APS have for renewables in 2002?

A. In 2002, APS received $6,571,745 from the Environmental Portfolio Surcharge, $6,000,000 in System Benefits, and $259,000 from its Solar Partners program.

Q. How much additional funding would APS have needed to meet its 2002 EPS requirement?

A. Per APS' response to STF 9-59, APS would have needed an additional $50.2 million to meet its EPS requirement by continuing to install photovoltaic (PV) systems itself to meet the solar portion of the requirement.

Q. What does Staff recommend regarding funding of the EPS for APS?

A. An increase of $50.2 million would be an extraordinary increase. However, Staff does recommend that funding for renewables be increased by a smaller amount to help APS meet its EPS requirements. The increase should occur in the Environmental Portfolio Surcharge (Rate Schedule EPS-1). Staff recommends that the rate on EPS-1 remain at $0.000875 per kWh, but that the monthly caps per service be increased to $0.99 for residential customers, $25.00 for non-residential customers, and $100.00 for non-residential customers with demands of 3,000 kW or more. It should be emphasized that not all customers would pay the amounts of the caps every month. The caps are a maximum. This should result in an increase in revenues from the surcharge of about $4.4 million.

In addition, Decision No. 63354 had approved EPS-1 on an interim basis, pending true-up in a rate review proceeding in which fair value findings are determined by the Commission. Since the current proceeding would constitute such a rate review proceeding, Staff recommends that the EPS-1 be made permanent with Staff's proposed revisions.

Q. What else does Staff recommend regarding the EPS for APS?

A. Currently, APS meets the solar portion of its portfolio requirement mostly by installing photovoltaic ("PV") systems themselves. Staff recommends that APS take the following actions to make the available dollars go further:

- APS should expand its existing buydown program, where customers pay for part of the cost of projects.
- APS should pursue more large-scale solar thermal electric projects.
- APS should enter into contracts to buy electricity or EPS credits from private developers of solar projects (PV or thermal).

RETURNING CUSTOMER DIRECT ASSIGNMENT CHARGE

Q. What is the Returning Customer Direct Assignment Charge?

A. The Returning Customer Direct Assignment Charge ("RCDAC") is intended to recover from Direct Access customers the additional costs, both one-time and recurring, that these customers would otherwise impose on other Standard Offer customers if and when the former return to Standard Offer service from their competitive suppliers. Decision No. 66567 approved the RCDAC for APS with conditions as proposed by Staff.

Q. What were those conditions?

A. Staff recommended the following conditions:

1. The RCDAC tariff should specify that the charge will be applicable only to individual customers or aggregated groups of customers of 3 MW or greater.
2. The RCDAC tariff should indicate that a customer will not be subject to the RCDAC if the customer provides APS with one year's advance notice of intent to take Standard Offer service.
3. APS should break down the individual components of the potential charge on the RCDAC tariff, define them, and provide a general framework that describes the way in which the RCDAC will be calculated.

4. APS should file a revised Schedule AP-2 for Staff review prior to its implementation.

5. The RCDAC and Schedule AP-2 should not be effective until the conclusion of APS' rate case.

Q. What is Staff's position on the RCDAC at this time?

A. Staff continues to not oppose the RCDAC with the above conditions.

SERVICE SCHEDULES

Schedule 1 - Terms and Conditions for Standard Offer and Direct Access Services

Q. What does Staff recommend in regard to Schedule 1?

A. APS has proposed many changes to Schedule 1, including some of the charges. Although most of the proposed wording changes are acceptable, Staff recommends that the charges primarily be cost-based, rounded up to the nearest $0.50. APS provided cost information in DJR_WP1.

Q. Which charges does either APS or Staff propose to change?

A. The charges and proposed changes are summarized in the following table:

Description (Schedule 1 Section)	Current Charge	APS Proposed Charge	Staff Proposed Charge
trip charge (2.2.1)	none	$17.50	$16.00
after-hour service establishment (2.2.2)	$50	$75.00	$75.00
after-hour other services (2.2.3)	none	hourly rate	$75.00
overhead reconnection (4.5.1)	$87.50	$100.00	$96.50
underground reconnection (4.5.1)	$125.00	$125.00	$115.00
on-site energy evaluation (4.6)	$50.00	$90.00	$82.00
joint site meeting (6.2.3)	$30.00 metro $75.00 outside $30/hr after 30 minutes	$70.00 all areas hourly rate after 30 minutes	$62.00 all areas $53/hr after 30 minutes
reread charge (6.4.4 and 6.4.5)	$10.00	$20.00	$16.50
meter test (6.5)	$25.00	$30.00 meter shop $100.00 field	$30.00 meter shop $50.00 field

Q. Please discuss your recommendation regarding the trip charge.

A. The proposed trip charge would occur when a company representative travels to a customer site to establish, reconnect, or re-establish service but is unable to complete the requested service due to lack of access to the meter panel. APS proposes that the charge be $17.50. Because DJR_WP1 shows costs for a trip to be $15.56, Staff recommends that the trip charge be set at $16.00.

Q. Please discuss your recommendation regarding the after-hour establishment charge.

A. An after-hour charge occurs when a customer requests that service be established, reconnected, or re-established outside of regular working hours or on the same day of request. The current charge is $50.00. APS proposes to increase the charge to $75.00. Although DJR_WP1 show costs to be $91.13, Staff recommends that the after-hour charge be set at $75.00 because an increase in a charge should not be too large.

Q. Please discuss your recommendation regarding the after-hour charge for other services.

A. This is a new charge for service establishment work that is generally more complicated and time consuming than basic service activities. APS has proposed that the charge be billed at hourly rates to be determined by the company. Staff recommends that the charge be set at a fixed rate so that the customer knows in advance what the charge will be. Staff recommends that the charge be set at $75.00 to be consistent with the after-hour establishment charge discussed above.

Q. Please discuss your recommendation regarding the overhead and underground reconnection charges.

A. When a customer is reconnected after being terminated for delinquent payments, the customer is charged a reconnection charge. If the termination was at the pole (overhead), then the reconnection charge is currently $87.50. If the termination was in underground equipment, the reconnection charge is currently $125.00. APS has proposed to increase the overhead reconnection charge to $100.00 and leave the underground reconnection charge at $125.00. Because the costs of reconnection are $96.03 for overhead and $114.54 for underground, Staff recommends that the overhead reconnection charge be set at $96.50 and the underground reconnection charge be reduced to $115.00.

Q. Please discuss your recommendation regarding the on-site energy evaluation charge.

A. An on-site evaluation charge occurs when a company field investigator performs an on-site visit to evaluate how a customer may reduce energy usage. APS proposes to increase this charge from $50.00 to $90.00. Since DJR_WP1 shows costs to be $81.98, Staff recommends that the on-site evaluation charge be set at $82.00.

Q. Please discuss your recommendation regarding the joint site meeting charge.

A. A joint site meeting charge occurs when an Electric Service Provider ("ESP") or a customer requests a joint meeting for removal of the company's metering equipment or lock ring. Currently, there is a $30.00 charge for meetings in the Phoenix metropolitan area and $75.00 for all other areas. There is an additional charge of $30.00 per hour if the meeting exceeds 30 minutes. APS proposes to charge $70.00 for all areas plus an hourly rate to be determined by the company for meetings that exceed 30 minutes. Actual costs are $30.72 for meetings in the Phoenix area, $92.68 for meetings elsewhere, and $52.96 for meetings that exceed 30 minutes. Since the average cost is $61.71, Staff recommends that the joint site meeting charge be set at $62.00 for all areas plus $53.00 per hour for meetings that exceed 30 minutes. Although this would be a large increase for meetings in Phoenix, no one was charged a joint site meeting charge from January 2001 through September 2003.

Q. Please discuss your recommendation regarding the reread charge.

A. A reread charge occurs when the company is asked to reread a customer's meter, and the original reading was not in error. A reread charge also occurs when a Meter Reading Service Provider fails to provide meter read data to the company, and the company obtains the data. The current charge is $10.00, and APS proposes to increase the charge to $20.00. Because actual costs are $16.50, Staff recommends that the reread charge be set at $16.50.

Q. Please discuss your recommendation regarding the meter test charge.

A. APS will test a meter upon request. If the meter is found to be within acceptable limits, there is a meter read charge, currently set at $25.00. APS proposes to increase the charge to $30.00 if the test is performed in the meter shop and $100.00 if the test is performed in the field. Actual costs vary by phase and type of meter. Staff recommends that the meter test charge be set at $30.00 if performed in the meter shop and, to avoid too large of an increase, $50.00 if performed in the field.

Q. What else does Staff recommend for Schedule 1?

A. APS has suggested revised wording to Section 2.5.1.2 regarding criteria for not requiring a security deposit. APS would replace language accepting a letter from another electric utility with language about an acceptable credit rating. Staff opposes this change because it would not be consistent with A.A.C. R14-2-203.B.b.

APS has proposed rewording Section 5.4 regarding company access to customer sites. Staff accepts the changes but recommends that the following sentence be added to the end of the paragraph: "Written termination notice is required prior to disconnecting service under this schedule."

APS has proposed a new provision (Section 5.5.2) regarding customers creating hazards or obstructions of easements. Staff recommends the new provision be adopted but that the following sentence be added: "Company will notify the customer in writing of the violations."

In Section 6.2, all references to "Load Serving ESP" should be replaced with "Meter Service Provider" or "MSP."

In Section 6.4, "Load Serving ESP" should be replaced with "Meter Reading Service Provider."

<u>Schedule 3 - Conditions Governing Extensions of Electric Distribution Lines and Services</u>

Q. Please explain the current construction allowance policy.

A. Currently, when a residential customer requests a line extension, there is no cost to the customer for 1,000 feet. The customer would pay the cost for any additional feet up to 2,000 feet or up to $25,000. That payment would be made in the form of an advance which is refundable as additional customers are served off of the line extension. If the advance has not been totally refunded within five years, the advance is no longer refundable.

Q. What has APS proposed in regard to this policy?

A. APS has proposed replacing the 1,000-foot construction allowance with a cost allowance of $3,500. For costs between $3,500 and $25,000, the customer would pay a non-refundable contribution in aid of construction.

Q. What does the proposed change in the construction allowance mean to customers?

A. Per the testimony of APS witness Mr. David Rumolo (p. 9, lines 5-9), the proposed $3,500 allowance equates to the cost of a typical underground extension of 500 feet, while the cost of an overhead extension of 1,000 feet is approximately $10,000. In response to STF 7-49, APS states that the $3,500 allowance equates to approximately 200 feet of an overhead extension. Therefore, under APS' proposed $3,500 allowance, customers would receive 1/5 to 1/2 of the footage that is currently allowed. Staff opposes replacing the 1,000-foot allowance with a $3,500 allowance.

Q. What does Staff recommend in regard to customer advances of costs?

A. Staff recommends that the current refundable advances be retained in Schedule 3. This would be consistent with the provisions of A.A.C. R14-2-207.C.1.

<u>Schedule 7 - Electric Meter Testing and Maintenance Plan</u>

Q. Please describe APS' proposed changes to Schedule 7.

A. APS has proposed editorial changes to reflect current American National Standards Institute ("ANSI") standards and the addition of language for performance of solid-state meters.

Q. What is Staff's recommendation regarding Schedule 7?

A. Staff recommends that the changes reflecting current ANSI standards not be made at this time. Currently, A.A.C. R14-2-209.E.1 requires the use of "the 1995 edition (and no future editions) of ANSI C12.1 (American National Standard Code for Electricity Metering)." Staff also opposes replacing the words "meter maintenance and testing program" with "performance monitoring plan." A.A.C. R14-2-209.E.2 uses "meter maintenance and testing program." To use "performance monitoring plan" may be misleading regarding the intent of the rule.

<u>Schedule 10 - Terms and Conditions for Direct Access</u>

Q. What does Staff recommend for Schedule 10?

A. In Section 3.6.1, the last word should be "less" instead of "more."

Section 4.2.1 provides for an Electric Service Provider to obtain customer usage data from APS and that APS may charge for the data. Staff recommends that the phrase "at rates approved by the ACC" not be removed from the paragraph.

In Section 5.1.7, the words "Meter Reading Service Providers ("MRSP")" should not be replaced with "a Load Serving ESP or its MRSP when providing meter reading services." Only an MRSP, not a Load-Serving ESP, can provide meter reading services.

Section 8.12.2 must be made consistent with A.A.C. R14-2-1612.L.10 and 11 in regard to the ownership of Current Transformers and Potential Transformers.

In the last sentence of Section 8.15, "MSRP" should be "MRSP."

In Section 8.16.1.3, the words "with the" should be deleted.

SUMMARY OF STAFF RECOMMENDATIONS

Q. Please summarize Staff's recommendations.

A.
1. Staff recommends that APS be allowed to recover its costs for pre-approved demand-side management ("DSM") programs through a DSM adjustment mechanism.
2. Staff recommends that the total of System Benefits should be $33,115,801.
3. Staff recommends that the caps per service on EPS-1 be increased to help APS meet its Environmental Portfolio Standard requirements and that the tariff be made permanent. Staff also recommends that APS take steps to make the dollars go further.
4. Staff does not oppose the Returning Customer Direct Assignment Charge with conditions.
5. Staff recommends that the trip charge be set at $16.00.

6. Staff recommends that the after-hour establishment charge be set at $75.00.

7. Staff recommends that the after-hour charge for other services be set at $75.00.

8. Staff recommends that the overhead reconnection charge be set at $96.50.

9. Staff recommends that the underground reconnection charge be reduced to $115.00.

10. Staff recommends that the on-site evaluation charge be set at $82.00.

11. Staff recommends that the joint site meeting charge be set at $62.00 for all areas plus $53.00 per hour for meetings that exceed 30 minutes.

12. Staff recommends that the reread charge be set at $16.50.

13. Staff recommends that the meter test be set at $30.00 if performed in the meter shop and $50.00 if performed in the field.

14. Staff opposes revised wording in Section 2.5.1.2 of Schedule 1 regarding criteria for not requiring a security deposit.

15. Staff recommends that a sentence about written termination notice be added to Section 5.4 of Schedule 1.

16. Staff recommends that a sentence about written notification of violations be added to Section 5.5.2 of Schedule 1.

17. Staff recommends that all references to "Load Serving ESP" be replaced with "Meter Service Provider" or “MSP” in Section 6.2 of Schedule 1.

18. Staff recommends that all references to “Load Serving ESP” be replaced with "Meter Reading Service Provider" in Section 6.4 of Schedule 1.

19. Staff opposes replacing the 1,000-foot allowance with a $3,500 allowance in Schedule 3.

20. Staff recommends that the current refundable advances be retained in Schedule 3.

21. Staff recommends that APS’ proposed changes in Schedule 7 reflecting current ANSI standards not be made at this time.

22. Staff opposes replacing the words “meter maintenance and testing program” with “performance monitoring plan” in Schedule 7.

23. Staff recommends that the word “more” be replaced with “less” in Section 3.6.1 of Schedule 10.

24. Staff recommends that the phrase “at rates approved by the ACC” should not be removed from Section 4.2.1 of Schedule 10.

25. Staff recommends that the words “Meter Reading Service Providers (“MRSP”)” should not be replaced with “a Load Serving ESP or its MRSP when providing meter reading services” in Section 5.1.7 of Schedule 10.

26. Staff recommends that Section 8.12.2 of Schedule 10 be made consistent with A.A.C. R14-2-1612.L10 and 11 in regard to the ownership of Current Transformers and Potential Transformers.

27. Staff recommends correcting typos in Sections 8.15 and 8.16.1.3 of Schedule 10.

Q. Does this conclude your direct testimony?

A. Yes, it does.

RESUME

BARBARA KEENE

Education

B.S.	Political Science, Arizona State University (1976)
M.P.A.	Public Administration, Arizona State University (1982)
A.A.	Economics, Glendale Community College (1993)

Additional Training

Management Development Program - State of Arizona, 1986-1987
UPLAN Training - LCG Consulting, 1989, 1990, 1991
various seminars, workshops, and conferences on energy efficiency, rate design, computer skills, labor market information, training trainers, and Census products

Employment History

Arizona Corporation Commission, Utilities Division, Phoenix, Arizona: Public Utilities Analyst V (October 2001-present), Senior Economist (July 1990-October 2001), Economist II (December 1989-July 1990), Economist I (August 1989-December 1989). Conduct economic and policy analyses of public utilities. Coordinate working groups of stakeholders on various issues. Prepare Staff recommendations and present testimony on electric resource planning, rate design, special contracts, energy efficiency programs, and other matters. Responsible for maintaining and operating UPLAN, a computer model of electricity supply and production costs.

Arizona Department of Economic Security, Research Administration, Economic Analysis Unit: Labor Market Information Supervisor (September 1985-August 1989), Research and Statistical Analyst (September 1984-September 1985), Administrative Assistant (September 1983-September 1984). Supervised professional staff engaged in economic research and analysis. Responsible for occupational employment forecasts, wage surveys, economic development studies, and over 50 publications. Edited the monthly **Arizona Labor Market Information Newsletter**, which was distributed to about 4,000 companies and individuals.

Testimony

Resource Planning for Electric Utilities (Docket No. U-0000-90-088), Arizona Corporation Commission, 1990; testimony on production costs and system reliability.

Trico Electric Cooperative Rate Case (Docket No. U-1461-91-254), Arizona Corporation Commission, 1992; testimony on demand-side management and time-of-use and interruptible power rates.

Navopache Electric Cooperative Rate Case (Docket No. U-1787-91-280), Arizona Corporation Commission, 1992; testimony on demand-side management and economic development rates.

Arizona Electric Power Cooperative Rate Case (Docket No. U-1773-92-214), Arizona Corporation Commission, 1993; testimony on demand-side management, interruptible power, and rate design.

Tucson Electric Power Company Rate Case (Docket Nos. U-1933-93-006 and U-1933-93-066) Arizona Corporation Commission, 1993; testimony on demand-side management and a cogeneration agreement.

Resource Planning for Electric Utilities (Docket No. U-0000-93-052), Arizona Corporation Commission, 1993; testimony on production costs, system reliability, and demand-side management.

Duncan Valley Electric Cooperative Rate Case (Docket No. E-01703A-98-0431), Arizona Corporation Commission, 1999; testimony on demand-side management and renewable energy.

Tucson Electric Power Company vs. Cyprus Sierrita Corporation, Inc. (Docket No. E-0000I-99-0243), Arizona Corporation Commission, 1999; testimony on analysis of special contracts.

Arizona Public Service Company's Request for Variance (Docket No. E-01345A-01-0822), Arizona Corporation Commission, 2002; testimony on competitive bidding.

Generic Proceeding Concerning Electric Restructuring Issues (Docket No. E-00000A-02-0051), Arizona Corporation Commission, 2002; testimony on affiliate relationships and codes of conduct.

Tucson Electric Power Company's Application for Approval of New Partial Requirements Service Tariffs, Modification of Existing Partial Requirements Service Tariff 101, and Elimination of Qualifying Facility Tariffs (Docket No. E-01933A-02-0345) and Application for Approval of its Stranded Cost Recovery (Docket No. E-01933A-98-0471), Arizona Corporation Commission, 2002, testimony on proposals to eliminate, modify, or introduce tariffs and testimony on the modification of the Market Generation Credit.

Arizona Public Service Company's Application for Approval of Adjustment Mechanisms (Docket No. E-01345A-02-0403), Arizona Corporation Commission, 2003, testimony on the proposed Power Supply Adjustment and the proposed Competition Rules Compliance Charge.

Generic Proceeding Concerning Electric Restructuring Issues, et al (Docket No. E-00000A-02-0051, et al), Arizona Corporation Commission, 2003; Staff Report on Code of Conduct.

Publications

Author of the following articles published in the *Arizona Labor Market Information Newsletter*:

"1982 Mining Employees - Where are They Now?" - September 1984
"The Cost of Hiring" and "Arizona's Growing Industries" - January 1985
"Union Membership - Declining or Shifting?" - December 1985
"Growing Industries in Arizona" - April 1986
"Women's Work?" - July 1986
"1987 SIC Revision" - December 1986
"Growing and Declining Industries" - June 1987
"1986 DOT Supplement" and "Consumer Expenditure Survey" - July 1987
"The Consumer Price Index: Changing With the Times" - August 1987
"Average Annual Pay" - November 1987
"Annual Pay in Metropolitan Areas" - January 1988
"The Growing Temporary Help Industry" - February 1988
"Update on the Consumer Expenditure Survey" - April 1988
"Employee Leasing" - August 1988
"Metropolitan Counties Benefit from State's Growing Industries" - November 1988
"Arizona Network Gives Small Firms Helping Hand" - June 1989

Major contributor to the following books published by the Arizona Department of Economic Security:

Annual Planning Information - editions from 1984 to 1989
Hispanics in Transition - 1987

(with David Berry) "Contracting for Power," *Business Economics*, October 1995.

(with Robert Gray) "Customer Selection Issues," *NRRI Quarterly Bulletin*, Spring 1998.

Reports

(with Task Force) *Report of the Task Force on the Feasibility of Implementing Sliding Scale Hookup Fees*. Arizona Corporation Commission, 1992.

Customer Repayment of Utility DSM Costs, Arizona Corporation Commission, 1995.

(with Working Group) *Report of the Participants in Workshops on Customer Selection Issues,*" Arizona Corporation Commission, 1997.